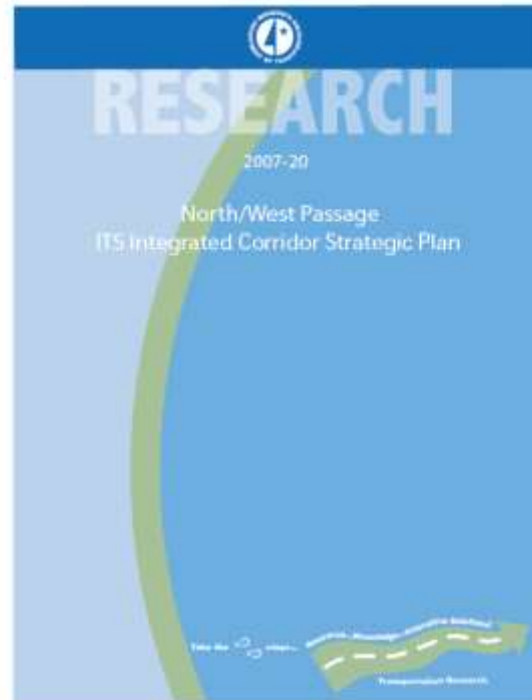


1. Introduction

North/West Passage completed an [ITS Integrated Corridor Strategic Plan](#) in July 2007. The plan outlined transportation issues within the corridor and established a vision with corresponding goals and objectives for the pooled fund. An ITS architecture and an inventory of ITS devices deployed along I-90 and I-94 were also included in the plan. The inventory was completed to help the states understand what had been deployed and to provide insight into the states' experiences with various technologies, technology preferences, and the potential for further deployment. The Strategic Plan also included a series of prospective projects through 2012 based on the inventory and corridor goals.

Many of the projects identified in the plan have been completed, along with several other projects related to the corridor goals and objectives. Additional ITS devices have also been deployed in the corridor. As the North/West Passage states consider future work plans for the pooled fund, [Project 7.1: Goal Assessment and Planning for ITS Corridor Deployment](#) was selected to assess their progress. Projects that have been completed to-date were mapped against each of the Strategic Plan goals as an initial indicator of progress. That information was then shared with the member states and a series of interviews were conducted to gather each state's impressions of progress toward the stated vision and goals. Finally, an updated inventory of ITS deployments in the corridor was reviewed as an additional assessment of progress. This document presents the specific updates that were made to the issues, vision, goals and objectives outlined in the 2007 Strategic Plan.



2. Updated Issues

When developing the initial plan in 2007, the North/West Passage states were asked to identify issues, problems and needs that were common in the corridor. Select ITS architecture, strategic planning and deployment documents from several states were also reviewed for issues related to the I-90/I-94 corridor. Issues were grouped into three broad categories – Traveler Information, Maintenance and Operations, and Planning and Program Management. In the five years since the initial set of issues were identified, the transportation environment has changed significantly enough to generate some new issues and make others obsolete. Following are the updated corridor issues based on input from the North/West Passage states.

2.1. Traveler Information

There is a wide variety of commuter, recreational, and commercial vehicle travelers who use the North/West Passage Corridor. A continual theme among the issues in this category is making information readily available to these diverse travelers. Travel is naturally heavier in the urbanized areas around Milwaukee, Minneapolis/St. Paul and Seattle where daily commuter traffic impacts are stronger and congestion related information is in greater demand. Conversely, travel is lighter and occurs over longer distances in rural parts of the corridor so there are greater needs for weather and road condition information.

The North/West Passage states continue to have numerous systems and diverse operating procedures for collecting, processing, and integrating data and for delivering information to travelers. Although progress has been made toward providing improved traveler information in the corridor despite this diversity, there continue to be challenges with coordinating information during major events. Meeting requirements for the Real-Time System Management and Operations Program (RTSMIP) by 2014 has been noted as a new challenge, but it may also offer additional support to the coordination challenge. The current issues associated with delivering corridor-wide traveler information are listed in Table 1.

Table 1 Updated Corridor Issues for Traveler Information

<ul style="list-style-type: none"> • Lack of consistent and adequate corridor-focused traveler information.
<ul style="list-style-type: none"> • Ongoing demand for resources to update and maintain traveler information across multiple services (e.g. phone, web, social media).
<ul style="list-style-type: none"> • Information for commercial vehicle travelers varies from state to state across the corridor.
<ul style="list-style-type: none"> • States continue to search for opportunities to make coordination more consistent for major events in the corridor.
<ul style="list-style-type: none"> • USDOT requires all states to report basic traffic and travel conditions on Interstate system highways and Metropolitan Area Interstate system highways no later than November 8, 2014.

2.2. Maintenance and Operations

Responsibilities for maintenance and operations are segregated among regional or district offices within the departments of transportation and sometimes among various local levels of government along I-90/I-94. The availability and responsibilities of operations staff also varies among the states. For example, some states may have a fully functional transportation management center with staff specifically dedicated to managing incidents and traveler information services. In contrast, other states may not have a physical center for their traffic management operations nor staff readily available to operate traveler information services from their location.

Some of the earlier issues identified for coordinating operations among the states have been resolved or become less relevant in recent years. Advancements in wireless communication have made the need for extensive fiber along the corridor less of a challenge for ITS deployments. The initial emphasis on achieving coordination through system-level integration has also diminished as the agencies have recognized that the complexity and expense of such integration is very prohibitive. Conversely, new issues have developed with evaluating costs and benefits, especially with the latest trends in competitive transportation funding and performance management. Although North/West Passage has completed projects to understand the extent of commercial vehicle parking issues and to streamline the

permitting process along the corridor, these challenges also continue and will likely remain as commercial movement in the corridor increases in coming years. The current issues associated with corridor maintenance and operations are listed in Table 2.

Table 2 Updated Corridor Issues for Maintenance and Operations

<ul style="list-style-type: none"> • Need to share information among local and regional transportation management centers.
<ul style="list-style-type: none"> • Differing perspectives on incidents and approaches to traffic management.
<ul style="list-style-type: none"> • Gathering reliable, accurate and timely information on work zones throughout the corridor is challenging.
<ul style="list-style-type: none"> • States are working to quantify the costs and benefits of deploying ITS devices in rural parts of the corridor
<ul style="list-style-type: none"> • Commercial vehicle travelers need adequate areas for rest and coordinated points for getting permits.

2.3. Planning and Program Management

The North/West Passage pooled fund envisions greater sharing, coordination and integration of traveler information and operations along I-90/I-94. Achieving this for travelers and for operational purposes requires some level of coordination in how ITS projects are planned and programmed across state borders. The group has pursued projects that support the coordination of traveler information and operations but state-level implementation of some project results has been limited by a lack of understanding how the individual states plan and program their ITS projects.

Additionally, there are more opportunities today for North/West Passage to pursue competitive Federal funding through efforts like the Multistate Corridor for Operations and Management Program. Sharing and coordinating, where appropriate, the planning and programming of ITS projects along the corridor could better position North/West Passage for competitive opportunities in the future. The growing emphasis on performance management in Federal transportation programs has also prompted a new issue associated with corridor performance measures. Table 3 illustrates the current issues associated with planning and programming for the North/West Passage.

Table 3 Updated Corridor Issues for Planning and Program Management

<ul style="list-style-type: none"> • Need for improved regional coordination among the states for planning and programming ITS projects.
<ul style="list-style-type: none"> • Differences in planning and funding of ITS projects among the states make it challenging for North/West Passage to advocate for corridor-oriented deployments.
<ul style="list-style-type: none"> • Need to understand how the corridor will pursue competitive funding opportunities.
<ul style="list-style-type: none"> • Lack of corridor oriented performance measures.

3. Updated Vision

In addition to the issues, problems and needs that were identified in the 2007 Strategic Plan, a vision and series of corresponding goals and objectives were developed for the North/West Passage Corridor. The vision provided a framework to guide the states’ future projects in the corridor. The corresponding goals and objectives were then intended to support the vision and further guide individual projects.

3.1. 2007 Vision from ITS Integrated Corridor Strategic Plan

The North/West Passage states are predominately rural and face similar transportation issues related to traffic management, traveler information and commercial vehicle operations. I-90 and I-94 connect these states and serve as significant east-west routes for travelers in the northern United States. Within the states, there are also numerous systems for collecting, processing, and integrating traveler and road maintenance information. Recognizing the value of coordinated, cross-border collaboration for ITS deployment to address these issues along I-90/I-94, the following vision was developed in the 2007 Strategic Plan.

The vision of the North/West Passage Corridor is to immediately influence ongoing standards development and utilize effective methods for sharing, coordinating, and integrating traveler information across state borders. While travel information reflects the initial destiny, maintenance and operations and planning and programming are long-term visions.

3.2. 2010 Vision Revised

The vision has been reviewed each year at the North/West Passage annual meetings, and in 2010 the vision was revised to be more concise and reflect the potential for additional coordination with the Canadian provinces north of the corridor. Based on the 2010 revisions, following is the current vision for North/West Passage.

The vision of the North/West Passage Corridor is to focus on developing effective methods for sharing, coordinating, and integrating traveler information and operational activities across state and provincial borders.

Based on North/West Passage members' most recent feedback, no further changes to the vision are recommended. All members are content with the streamlined version from 2010. States were also generally neutral on the reference to coordination with the Canadian provinces. Several commented that even though the group is still working hard to develop good coordination for I-90/I-94, the corridor is part of a larger network of other corridors (e.g., I-29, I-5, I-80) on the National Highway System. As such, leaving the provincial reference in the vision will remind the group that coordination along I-90/I-94 will eventually have broader impacts on coordination with and among other corridors.

4. Updated Goals and Objectives

Building off the issues identified for the corridor and the vision that was established for the North/West Passage program, three longer-term goals were developed for traveler information, operations and planning. To supplement the goals and focus near-term work for the program, a series of shorter term objectives were also developed. The goals and objectives reflect the unique issues and needs of the North/West Passage corridor but also relate to common transportation priorities within the individual states.

The program goals and objectives were assessed for this update by mapping projects that have been completed to-date to each of the objectives. Further review was conducted with members to gather their perspective on the continued relevance of the goals and objectives. In summary, the intent of the original goals is still valid with some slight modifications to reflect today's context. The following tables

present the updated goals and objectives, reflecting member input and the current transportation environment.

Goal 1: Integrate state traveler information to provide corridor-wide information appropriate to the location and need of the traveler.
Objective 1: Understand the common and unique information needs of the corridor's diverse travelers. This includes the type of information, as well as the mechanism for delivering the information.
Objective 2: Provide integrated traveler information along the entire corridor.
Objective 3: Provide integrated traveler information systems where appropriate and technically feasible.

Goal 2: Develop and promote cross-border jurisdictional cooperation and coordination in the deployment, operations and maintenance of ITS.
Objective 1: Maintain awareness and understanding of coordination tools and best practices among the North/West Passage states.
Objective 2: Establish and maintain shared procedures for coordinating traveler information and operations among the states.

Goal 3. Coordinate the planning and deployment of ITS projects for the North/West Passage Corridor among state, regional, and local planning and programming processes.
Objective 1: Develop a one to three-year list of key ITS deployments for the corridor.
Objective 2: Document and share lessons learned from integration of ITS projects into state, regional, and local planning and programming processes.

As the goals and objectives were reviewed for their continued relevance, additional observations made about the program's progress toward them. The greatest progress has been made toward the goals for integrating traveler information and developing cross-border coordination. Most of the projects completed through 2012 have been associated with these goals and members noted that the collaboration that has occurred among the states through these projects has been extremely valuable. Although generally pleased about the progress that has been made to coordinate efforts among the states, members also consistently noted that much more work is needed to strengthen the coordination and maintain what has been established.

It was also noted that a very limited number of completed projects have been aimed at understanding traveler needs in the corridor. When members were asked if they felt enough was known about most travelers' needs, most agreed that enough was known in terms of the group's ability to address those needs. However, several states also pointed out that more could be known about the unique needs of commercial vehicle travelers. Members noted that several projects have been initiated to address select challenges – permitting and parking availability – that commercial vehicle travelers are believed to experience in the corridor but it is not clear if these are the most significant challenges to address. Some members also expressed concern over the North/West Passage's ability to influence implementation for some projects, particularly those that may require legal or policy changes. Making additional progress toward goals 1 and 2 as they relate to commercial vehicle travel in the corridor will require additional

effort to better understand commercial vehicle needs and how North/West Passage can effectively influence changes to address them.

In addition to strengthening coordination and better understanding commercial vehicle travelers, North/West Passage has also made limited progress toward their goal to coordinate the planning of ITS projects in the corridor. This is particularly relevant to projects that involve the deployment of ITS devices or systems that could enhance the coordination of traveler information and operations. All of the members agreed that the North/West Passage should continue to develop and influence deployment projects in the corridor. Most states noted the best role for North/West Passage is to clearly explain the corridor need for and potential benefits of particular deployments.

5. Closing

The 2007 strategic planning process was useful for the North/West Passage program to more clearly identify the issues for the I-90/I-94 corridor between Washington and Wisconsin that could potentially be addressed by their work. The process also clarified the program vision and established specific goals and objectives that have influenced the projects completed each year since.

This effort to assess the program's progress toward its goals has also been useful for the states to reflect on their accomplishments, validate their strategic direction for the corridor and identify future areas of potential work. Evaluating progress on a periodic basis is useful for all organizations. As such, the North/West Passage may choose to conduct a similar evaluation again in another 3-5 years, particularly in light of the ever changing transportation landscape.

The modified issues, vision, goals and objectives presented in this document will serve in conjunction with the 2007 Strategic Plan as a supplemental update and will be used by the North/West Passage program in the development of future work plans.